## ABSTRACT

Following a catheterisation of the artery, the flow of blood through the puncture wound has to be stopped. With the method according to the invention, the time for achieving haemostasis can be reduced by combining the normal clotting mechanism with a chitosan induced clogging mechanism. A compression device (1; 8; 16) for achieving haemostasis in a puncture wound comprises a compressor (2; 9; 17) and a pressure element (3; 10; 18) connected to said compressor (2; 9; 17) so that the bottom side of the pressure element (3; 10; 18) is in contact with the puncture wound, characterized in that the bottom side of the pressure element (3; 10; 18) is provided with chitosan, so that the chitosan and the external compression pressure are applied simultaneously on the puncture wound when the compressor (2; 9; 17) applies an external compression pressure on the puncture wound via the pressure element (3; 10; 18).